

# **CULTURAL RESOURCES SURVEY OF THE RIDGEVILLE TO MCQUEEN 115kV TRANSMISSION PROJECT, DORCHESTER AND BERKELEY COUNTIES, SOUTH CAROLINA**



**Chicora Research Contribution 587**

# **CULTURAL RESOURCES SURVEY OF THE RIDGEVILLE TO MCQUEEN 115kV TRANSMISSION PROJECT, DORCHESTER AND BERKELEY COUNTIES, SOUTH CAROLINA**

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## MANAGEMENT SUMMARY

This report provides the results of a cultural resources investigation of a 6.01 mile transmission line situated in the central east portion of Dorchester County and central west portion of Berkeley County. The study was conducted by Andrew Hyder, under the supervision of Dr. Michael Trinkley of Chicora Foundation for Mr. Tommy Jackson of Central Electric Power Cooperative. The work is intended to assist this client comply with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

The corridor is to be used by Central Electric Power Cooperative for the construction of the Ridgeville to McQueen 115kV transmission line. The proposed corridor will start at an existing transmission line and run west to the existing Ridgeville substation.

The proposed route will require the clearing of the corridor, followed by construction of the proposed transmission line. These activities have the potential to affect archaeological and historical sites that may be in the project corridor. For this study an area of potential effect (APE) 100 feet around the proposed transmission line was assumed.

Dorchester and Berkeley Counties have both received comprehensive surveys, coupled with a variety of brief local. In spite of the previous work, no architectural sites have been identified within the APE.

An investigation of the archaeological site files at the S.C. Institute of Archaeology and Anthropology failed to identify any previously recorded archaeological sites within the project's APE.

The archaeological study of the transmission line incorporated shovel testing at

100-foot intervals along the center-line of the proposed corridor, which had been cut and staked at the time of this investigation. All shovel test fill was screened through ¼-inch mesh and the shovel tests were backfilled at the completion of the study. A total of 180 shovel tests were excavated in the survey corridor.

One archaeological site (38DR494), a prehistoric lithic scatter consisting of five pressure flakes, were recovered in two positive shovel tests. The site is recommended not eligible for inclusion on the National Register of Historic Places.

A survey of public roads within 100 feet of the survey area was conducted in an effort to identify any architectural sites over 50 years old that also retained their integrity. No additional structures were found.

It is possible that archaeological remains may be encountered in the project area during construction. Construction crews should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office or to Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No construction should take place in the vicinity of these late discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).





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# Introduction

This investigation was directed by Dr. Michael Trinkley of Chicora Foundation, Inc. for Mr. Tommy L. Jackson of Central Electric Power Cooperative. The work was conducted to assist Central Electric Power Cooperative to comply with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

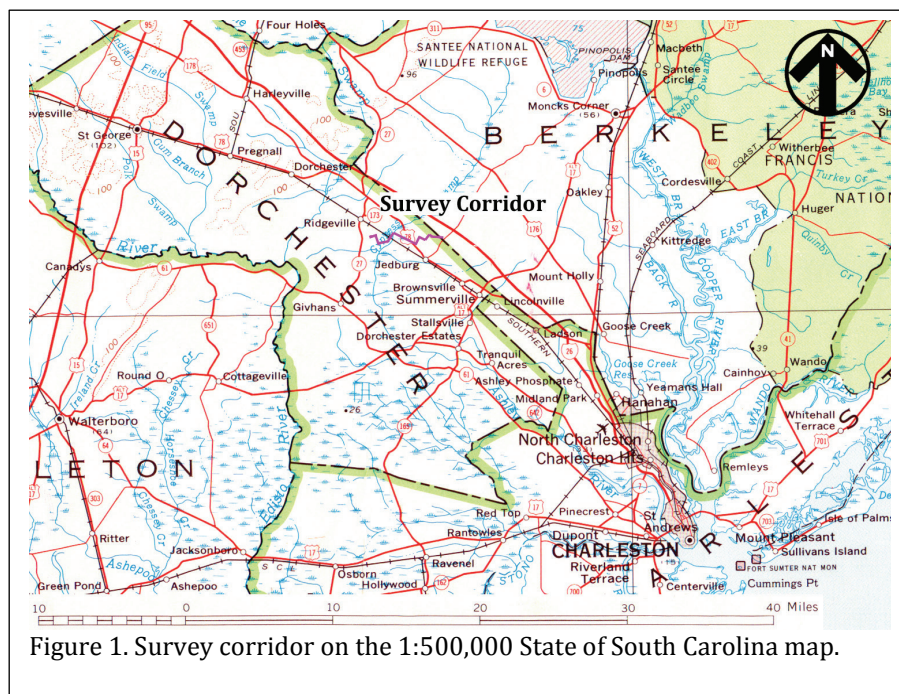
fields, until turning west, parallel with Campbell Thicket Road. Corridor crosses Campbell Thicket Road on the west side of existing Ridgeville substation (Figure 2).

The corridor exhibits little variable topography, crossing agricultural fields and lowland swamp areas. Elevations range from just under 25 feet above mean sea level (AMSL) to 55 feet AMSL. Areas of old cultivation are occasionally terraced, planted pines are common, some areas are heavily wooded, and large sections of the corridor consist of wetlands.

The proposed corridor, as previously mentioned, is intended to be used as a transmission line. Landscape alteration, primarily clearing and construction, including erection of poles, will damage the ground surface and any archaeological resources that may be

present in the survey area. Construction and maintenance of the transmission line may also have an impact on historic resources in the project area.

The project will not directly affect any historic structures (since none are located on the survey corridor), but the completed facility may detract from the visual integrity of historic properties, creating what some consider discordant surroundings. As a result, this architectural survey



The project site consists of a 6.01-mile corridor to be used for an 115kV Transmission Line in the portions of central east Dorchester and central west Berkeley County (Figure 1). Beginning at an existing McQueen powerline on the west side of Berkeley County the line runs west crossing over into Dorchester County, north of Dawson branch road. Turning southwest crossing Highway 78 and entering the edge of Ashley Swamp. Corridor turns northwest crossing through several agricultural



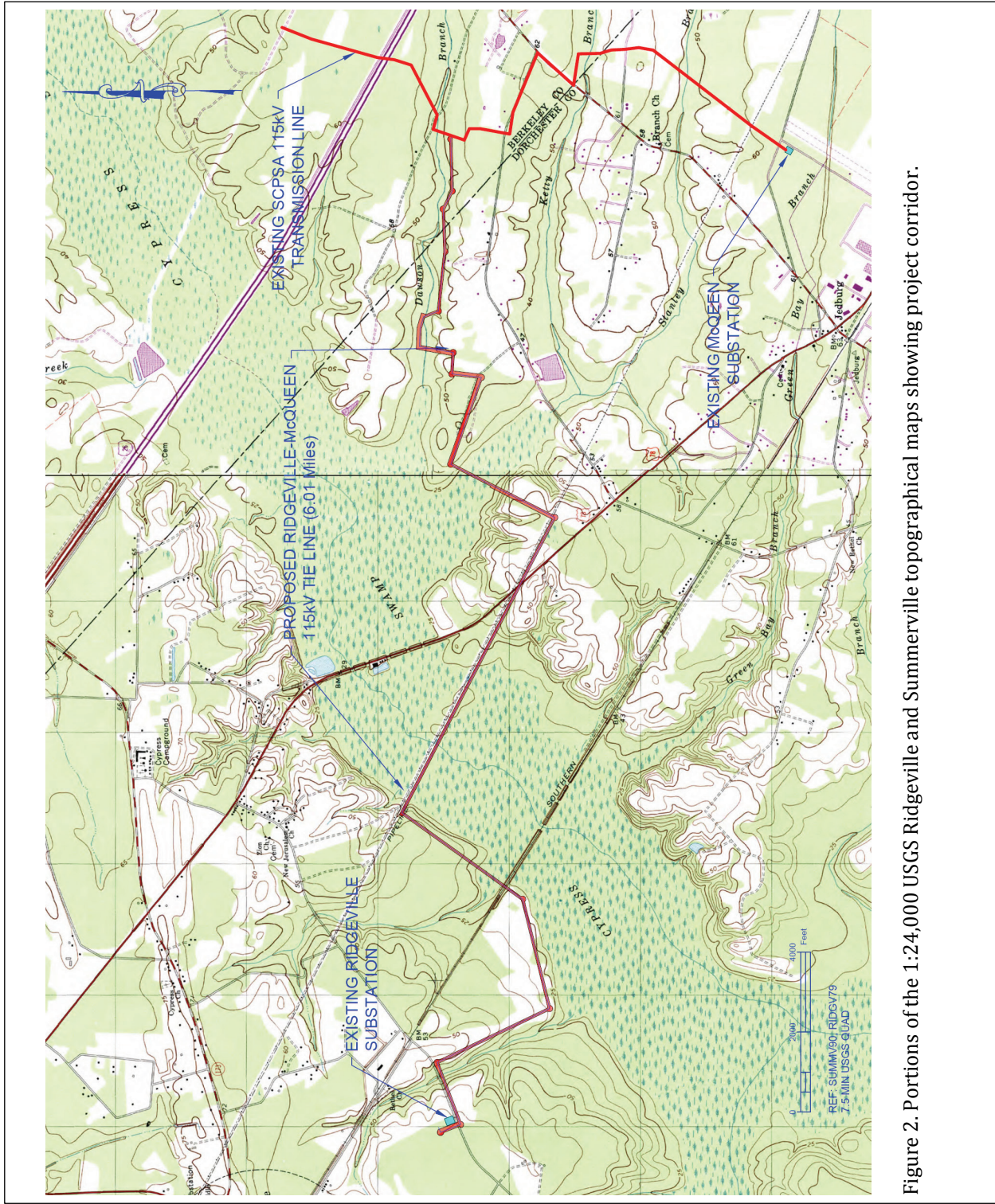


Figure 2. Portions of the 1:24,000 USGS Ridgeville and Summerville topographical maps showing project corridor.

uses an area of potential effect (APE) 100 feet around the proposed corridor. This distance was selected since the proposed corridor will use only single poles or H-frame wood poles, the corridor is primarily 75 feet in width, tree cover in most areas is heavy, there are numerous transmission lines already present, and much of the corridor has already lost its rural character.

This study, however, does not consider any future secondary impact of the project, including increased or expanded development of this portion of Dorchester and Berkeley counties.

We were requested by Mr. Tommy L. Jackson of Central Electric Power Cooperative to conduct the cultural resource study in February 2018, with the field investigations conducted by Andrew Hyder, under the supervision of Dr. Michael Trinkley from February 13<sup>th</sup> through 19<sup>th</sup>, 2018. The architectural survey and evaluations were conducted by Dr. Trinkley at this same time.

These investigations incorporated a review of ArchSite and the site files at the South Carolina Institute of Archaeology and Anthropology. As a result of that work, no previously recorded archaeological sites were identified in or even close to the APE. Two comprehensive architectural surveys are available for Dorchester or Berkeley Counties (Schneider and Fick 1989 and Fick and Davis 1996). No architectural sites have been identified within the APE in either county and no architectural sites were identified on ArchSite.

Archival and historical research was limited to a review of secondary sources available in the Chicora Foundation files and at the South Caroliniana Library.

The archaeological survey identified one archaeological site within the corridor, Archaeological site, 38DR494.

The architectural survey of the APE, designed to identify any structures over 50 years in age that retain their integrity and that are

potentially eligible for the National Register of Historic Places revealed no such structures were identified.

Report production was conducted at Chicora's laboratories in Columbia, South Carolina on February 20<sup>th</sup> through 23<sup>rd</sup>, 2018. The only photographic materials associated with this project are digital and will be retained by Chicora Foundation. All other field notes and the resulting collections will be curated at the South Carolina Institute of Archaeology and Anthropology.

## INTRODUCTION

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# Environmental Background

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## Physiography and Geology

Berkeley and Dorchester counties are situated in the lower Atlantic Coastal Plain of South Carolina. Containing about 1,660 square miles combined, these two counties are bordered to the north by Clarendon, Williamsburg, and Georgetown counties, the division being the Santee River. Both are bordered to the east by Charleston County. To the south of Dorchester are Charleston and Colleton counties; while to the west is Orangeburg County. Within this block, the project area is situated in the center, south of the small community of Ridgeville.

The topography of the area is characterized by subtle undulation characteristic of beach ridge plains. The elevations range from less than 25 to approximately 55 feet above mean sea level (AMSL). In the vicinity of the transmission line the elevations range from about 25 to 50 feet AMSL. The topography is generally level with slopes rarely greater than about 2% — generally in the areas overlooking drainages such as Graveyard branch and Dawson branches.

The area is drained by three significant river systems: the Santee, Wando, and Cooper rivers. The Santee has a large freshwater discharge and forms the northern boundary with neighboring Georgetown County. The Wando is a coastal river, being dominated by tidal action. The Cooper River, which flows through the center of the County, was also originally a tidal river, but it has been modified by a large volume of fresh water diverted from the Santee through Lakes Marion and Moultrie. In addition, there are a number of broad, low-gradient interior drainages that are present either as extensions of tidal streams or flooded bays and swales. In particular, these

include Dawson, Kelly, and Stanley branches, all of which flow westward, draining into Cypress Swamp, which is located within the project area. To the south of the project is Green Bay Swamp and Platt Branch, which also drain into Cypress Swamp. To the south this becomes Great Cypress Swamp and it empties into the Ashley River.

As previously mentioned, Berkeley and Dorchester counties are made up of one broad physiographic area, often called the lower Atlantic Coastal Plain or the Atlantic Coast Flatwoods. The surface soils are almost entirely sedimentary and were transported into the area from elsewhere. The geology is characteristic of the region; the formations covering the surface date from the Pleistocene and includes sands, clays, gravels, and phosphates (Figure 3).

## Soils

In general the soils in this portion of Berkeley are part of the Goldsboro-Lynchburg-Rains Association and represent moderately either well drained soils that have a sand surface layer and loamy subsoil or soils which are somewhat poorly to poorly drained that are loamy throughout. In contrast, across the border into Dorchester County, the soils are classified as belonging to the Jedburg-Daleville-Izagora Association. In spite of the different name, these soils are also moderately well drained to poorly drained which a loamy surface layer and thick, loamy subsoil. Both associations are found in nearly level to gently sloping areas on upland terraces or small ridges.

There are eight primary soils found along the transmission line corridor — four soil series in Dorchester County and two in Berkeley County. Those in Dorchester include the Daleville silt



## ENVIRONMENTAL BACKGROUND

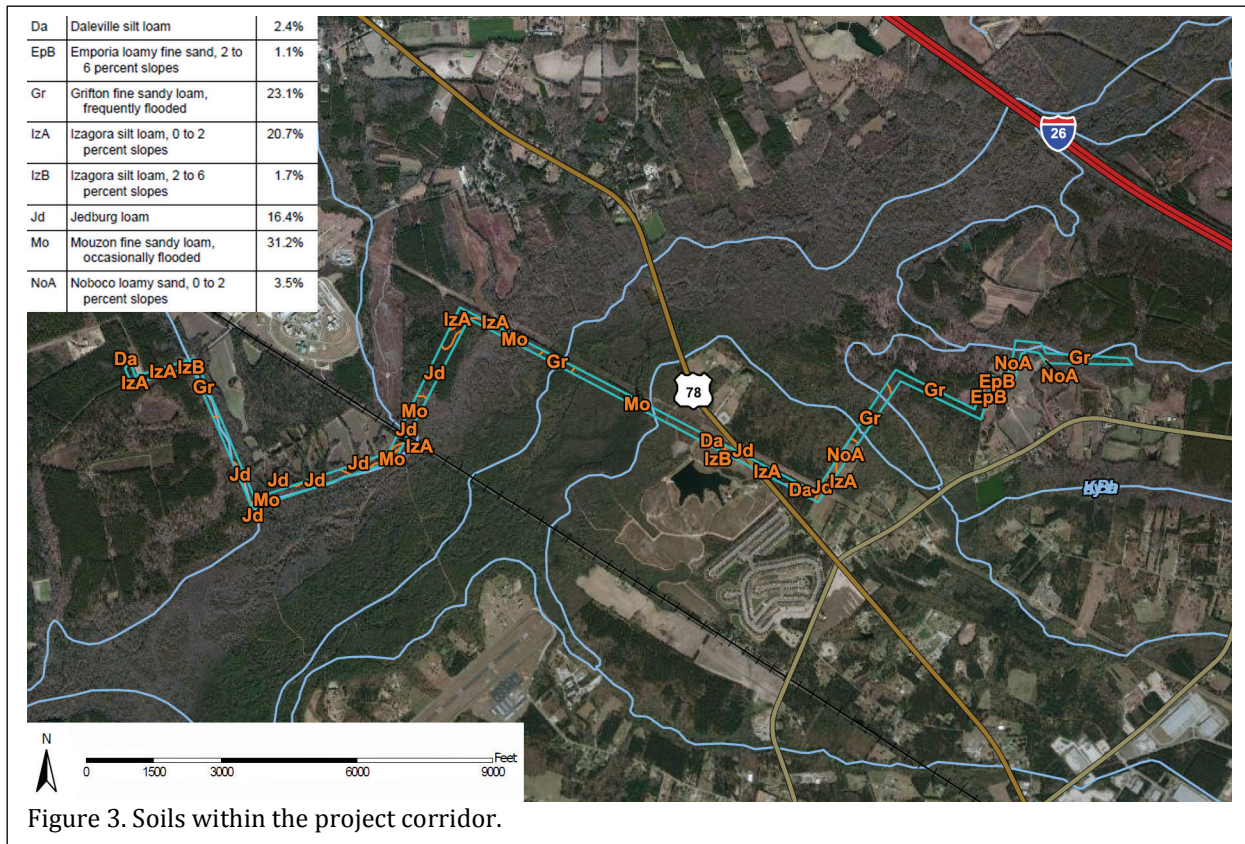


Figure 3. Soils within the project corridor.

loams, Emporia loamy fine sand, Izagora A and B silt loams, Nobocco loamy sands, and Jedburg loams. (Eppinette 1990).

Formed in loamy marine sediments, the typical Daleville soils exhibit an Ap horizon about 0.7 foot in depth of very dark grayish brown (10YR3/2) silt loam over an E horizon of light gray (10YR7/1) silt loam to depths of about 1.3 feet. These soils are found in depressions and drainage ways on upland terraces and may have season high water tables of 0.5 to 1.5 feet below grade.

The Emporia soils are also formed in marine sediments, but are found on floodplains and along small drainages. They are frequently flooded and may have a seasonal high water table within a foot of the surface. The A horizon, usually about 0.5 foot in depth, is a grayish brown (10YR4/2) sandy loam overlying an E horizon of light gray (10YR7/2) fine sandy loam to about 2.0

foot. Below this is a Bt1 strong brown (7.5YR5/1) clay loam.

The Izagora Series soils are found on gently sloping upland stream terraces and low ridges. As a result, they are better drained and seasonal high water is typically not closer than 1.5 to 2.5 feet of the surface. These soils may have an Ap horizon of dark grayish brown (10YR4/2) silt loam to a depth of about 0.5 foot. A Bt1 horizon of yellowish brown (10YR5/6) silt loam may be found below this to a depth of 1.1 feet.

The Jedburg soils are found on broad upland terraces, but may still exhibit a high water table within 0.5 foot of the surface. The typical profile consists of an A horizon of very dark gray (10YR3/2) loam about 0.4 foot in depth overlying an A2 horizon of dark grayish brown (10YR4/2) loam to about 0.7 foot. Below this, to a depth of about 1.4 feet, is a BE horizon of light yellowish

brown (10YR6/4) loam.

Nobocco Soils are found on gently sloping and are typically associated with landscapes consisting of Blanton, Bonneau, Daleville, Goldsboro, Izagora, Jedburg, Lynchburg, and Rains soils. As a result, they are better drained and seasonal high water is typically not closer than 1.5 to 2.5 feet of the surface. These soils may have an Ap horizon of dark grayish brown (10YR4/2) silt loam to a depth of about 0. foot. E horizon of yellowish brown (10YR5/6) silt loam may be found below this to a depth of 2.0 feet

The Berkeley County soils on the transmission line corridor include Mouzon fine sandy loam and Grifton fine sandy loam (Long 1980).

The Grifton soils are also formed in marine sediments, but are found on floodplains and along small drainages. They are frequently flooded and may have a seasonal high water table within a foot of the surface. The A horizon, usually about 0.5 foot in depth, is a grayish brown (10YR4/2) sandy loam overlying an E horizon of light gray (10YR7/2) fine sandy loam to about 0.8 foot. Below this is a gray (10YR5/1) sandy clay.

Mouzon soils are found on low upland terraces. These soils are poorly drained with the A horizon 0.5 foot in depth a brownish loamy subsurface (10YR3/2), E horizon grayish loamy subsoil (10YR7/1), followed by a grayish substratum (10YR5/1).

## Climate

Berkeley and Dorchester counties have a subtropical climate, characterized by warm summers, mild winters, and adequate precipitation fairly evenly spread throughout the year. Except in the summer, when maritime tropical air controls the climate of the area, the daily weather patterns are controlled by west to east moving pressure systems and associated fronts.

Yearly precipitation averages 47 inches, but ranges from 39 to 55 inches. The growing

season, from April to September, receives an average of 31 inches or about 66% of the yearly total. The average length of the freeze-free growing season is approximately 260 days, although frosts can occur as early as October 26 and as late as April 15 (Long 1980:46).

Mills remarked in 1826 that Carolina was similar to European climates, lying at similar latitude. He noted that:

In comparing the climate of South Carolina, with similar climates in Europe, we find it lying under the same atmospheric influences with Aix, Rochelle, Montpelier, Lyons, Bordeaux, and other parts of France; with Milan, Turin, Padua, Mantua, and other parts of Italy (Mills 1972 [1826]:133).

The coastal region is a moderately high-risk zone for tropical storms, with 169 hurricanes being documented from 1686 to 1972 (0.59 per year) (Mathews et al. 1980:56). One of the most devastating in the eighteenth century was the hurricane of September 15, 1752. One report listed 92 people drowned, although the death toll, especially among the African American slaves was likely much higher. The storm also had considerable long-term effects and Calhoun notes that:

the destruction of trees was severe; one plantation owner's loss was assessed at \$50,000 and many of those trees which survived were "heart-shaken," and unfit for use. Crops were even more damaged as the storm followed a severe drought. It was necessary to enact laws to regulate the exportation and sale of corn, "Peafe," and small rice, so that "the poor may be able to purchase Provisions at a moderate Price" (Calhoun 1983:9).



## Floristics

Speaking of the coastal plain Braun observed that:

the vegetation of this region is in part warm temperate-subtropical, in part distinctively coastal plain, and in part temperate deciduous. It is made up of widely different forest communities - coniferous, mixed coniferous and hardwood, deciduous hardwood, and mixed

deciduous and broad-leaved evergreen hardwood - interrupted here and there by swamps, bogs, and prairies. The large number of unlike communities is related to the diverse environmental conditions of the region (Braun 1974:282).

Indeed, an examination of the region around Berkeley and Dorchester counties reveals tremendous diversity. One detailed study revealed a mosaic including the oak-hickory-pine forest



Figure 4. Areas of mixed hardwoods, recently logged and showing the wet soils (above) and mixed hardwoods and wetlands along the west portion of the corridor (below).

common to upland areas, oak-gum-bald cypress forest typical of the southern floodplains, pine forests found in mesic to xeric upland sites, mesophytic broadleaved forests on more mesic slope sites, old rice fields, and a variety of swamp forests such as the tupelo-cypress, low hardwood, and ridge hardwoods (Federal Power Commission 1977). All of these forest types have different dominants and different understory vegetation (see Barry 1980).

In the project area the vegetation is dense (Figures 4), including a broad range of mesic species, as well as briars, poison ivy, and other herbaceous materials.



## ENVIRONMENTAL BACKGROUND

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# Prehistoric and Historic Synthesis

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## Prehistoric Overview

Overviews for South Carolina's prehistory, while of differing lengths and complexity, are available in virtually every compliance report prepared. There are, in addition, some "classic" sources well worth attention, such as Joffre Coe's *Formative Cultures* (Coe 1964), as well as some new general overviews (such as Sassaman et al. 1990 and Goodyear and Hanson 1989). Also extremely helpful, perhaps even essential, are a handful of recent local synthetic statements, such as that offered by Sassaman and Anderson (1994) for the Middle and Late Archaic and by Anderson et al. (1992) for the Paleoindian and Early Archaic. Only a few of the many sources are included in this study, but they should be adequate to give the reader a "feel" for the area and help establish a context for the various sites identified in the study areas. For those desiring a more general synthesis, perhaps the most readable and well balanced is that offered by Judith Bense (1994), *Archaeology of the Southeastern United States: Paleoindian to World War I*. Figure 5 offers a generalized view of South Carolina's cultural periods.

## Paleoindian Period

The Paleoindian Period, most commonly dated from about 12,000 to 10,000 B.P., is evidenced by basally thinned, side-notch projectile points; fluted, lanceolate projectile points; side scrapers; end scrapers; and drills (Coe 1964;

Michie 1977; Williams 1965). Oliver (1981, 1985) has proposed to extend the Paleoindian dating in the North Carolina Piedmont to perhaps as early as 14,000 B.P., incorporating the Hardaway Side-Notched and Palmer Corner-Notched types, usually accepted as Early Archaic, as representatives of the terminal phase. This view, verbally suggested by Coe for a number of years, has considerable technological appeal.<sup>1</sup> Oliver suggests continuity from the Hardaway Blade through the Hardaway-Dalton to the Hardaway Side-Notched, eventually to the Palmer Side-Notched (Oliver 1985:199-200). While convincingly argued, this approach is not universally accepted.

The Paleoindian occupation, while widespread, does not appear to have been intensive. Artifacts are most frequently found along major river drainages, which Michie interprets to support the concept of an economy "oriented toward the exploitation of now extinct mega-fauna" (Michie 1977:124). Survey data for Paleoindian tools, most notably fluted points, is somewhat dated, but has been summarized by Charles and Michie (1992). They reveal a widespread distribution across the state (see also Anderson 1992b: Figure 5.1) with at least several concentrations relating to intensity of collector activity. What is clear is that points are found fairly far removed from the origin of the raw material. Charles and Michie suggest that this may "imply a geographically extensive settlement system" (Charles and Michie 1992:247).

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<sup>1</sup> While never discussed by Coe at length, he did observe that many of the Hardaway points, especially from the lowest contexts, had facial fluting or thinning which, "in cases where the side-notches or basal portions were missing, . . . could be mistaken for fluted points of the Paleo-Indian period" (Coe 1964:64). While not an

especially strong statement, it does reveal the formation of the concept. Further insight is offered by Ward's (1983:63) all too brief comments on the more recent investigations at the Hardaway site (see also Daniel 1992).

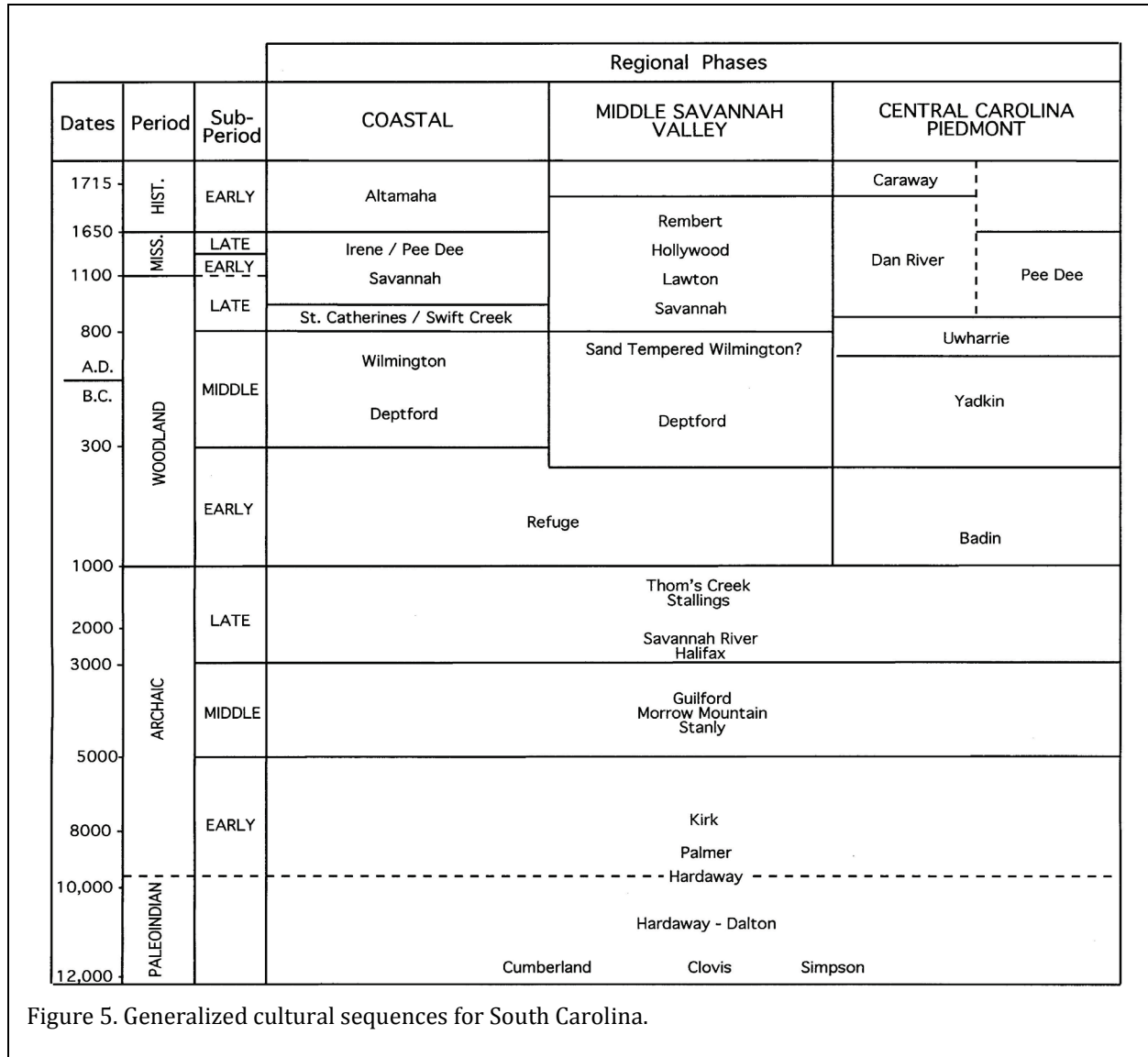


Figure 5. Generalized cultural sequences for South Carolina.

Although data are sparse, one of the more attractive theories that explains the widespread distribution of Paleoindian sites is the model tracking the replacement of a high technology forager (or HTF) adaptation by a "progressively more generalized band/microband foraging adaptation" accompanied by increasingly distinct regional traditions (perhaps reflecting movement either along or perhaps even between river drainages) (Anderson 1992b:46).

Distinctive projectile points include

lanceolates such as Clovis, Dalton, perhaps the Hardaway, and Big Sandy (Coe 1964; Phelps 1983; Oliver 1985). A temporal sequence of Paleoindian projectile points was proposed by Williams (1965:24-51), but according to Phelps (1983:18) there is little stratigraphic or chronometric evidence for it. While this is certainly true, a number of authors, such as Anderson (1992a) and Oliver (1985) have assembled impressive data sets. We are inclined to believe that while often not conclusively proven by stratigraphic excavations (and such proof may be an unreasonable

expectation), there is a large body of circumstantial evidence. The weight of this evidence tends to provide considerable support.

Unfortunately, relatively little is known about Paleoindian subsistence strategies, settlement systems, or social organization (see, however, Anderson 1992b for an excellent overview and synthesis of what is known). Generally, archaeologists agree that the Paleoindian groups were at a band level of society, were nomadic, and were both hunters and foragers. While population density, based on isolated finds, is thought to have been low, Walthall suggests that toward the end of the period, "there was an increase in population density and in territoriality and that a number of new resource areas were beginning to be exploited" (Walthall 1980:30).

## Archaic Period

The Archaic Period, which dates from 10,000 to 3,000 B.P.<sup>2</sup>, does not form a sharp break with the Paleoindian Period, but is a slow transition characterized by a modern climate and an increase in the diversity of material culture. Associated with this is a reliance on a broad spectrum of small mammals, although the white tailed deer was likely the most commonly exploited animal. Archaic period assemblages, exemplified by corner-notched and broad-stemmed projectile points, are fairly common, perhaps because the swamps and drainages offered especially attractive ecotones.

Many researchers have reported data suggestive of a noticeable population increase from the Paleoindian into the Early Archaic. This has tentatively been associated with a greater emphasis on foraging. Diagnostic Early Archaic artifacts include the Kirk Corner Notched point. As previously discussed, Palmer points may be included with either the Paleoindian or Archaic period, depending on theoretical perspective. As the climate became hotter and drier than the previous Paleoindian period, resulting in vegetational changes, it also affected settlement patterning as evidenced by a long-term Kirk phase midden deposit at the Hardaway site (Coe 1964:60). This is believed to have been the result of a change in subsistence strategies.

Settlements during the Early Archaic suggest the presence of a few very large, and apparently intensively occupied, sites that can best be considered base camps. Hardaway might be one such site. In addition, there were numerous small sites which produce only a few artifacts – these are the "network of tracks" mentioned by Ward (1983:65). The base camps produce a wide range of artifact types and raw materials that has suggested too many researchers long-term, perhaps seasonal or multi-seasonal, occupation. In contrast, the smaller sites are thought of as special purpose or foraging sites (see Ward 1983:67).

Middle Archaic (8,000 to 6,000 B.P.) diagnostic artifacts include Morrow Mountain, Guilford, Stanly, and Halifax projectile points. Much of our best information on the Middle Archaic

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<sup>2</sup> The terminal point for the Archaic is no clearer than that for the Paleoindian and many researchers suggest a terminal date of 4,000 B.P. rather than 3,000 B.P. There is also the question of whether pottery, such as the fiber-tempered Stallings ware, will be included as Archaic, or will be included with the Woodland. Oliver, for example, argues that the inclusion of ceramics with Late Archaic attributes "complicates and confuses classification and interpretation needlessly" (Oliver 1981:20). He comments that according to the original definition of the Archaic, it "represents a preceramic horizon" and that "the presence of ceramics provides a convenient marker for

separation of the Archaic and Woodland periods" (Oliver 1981:21). Others would counter that such an approach ignores cultural continuity and forces an artificial, and perhaps unrealistic, separation. Sassaman and Anderson (1994:38-44), for example, include Stallings and Thom's Creek wares in their discussion of "Late Archaic Pottery." While this issue has been of considerable importance along the Carolina and Georgia coasts, it has never affected the Piedmont, which seems to have embraced pottery far later, well into the conventional Woodland period. The importance of the issue in the nearby Sand Hills, unfortunately, is not well known.



comes from sites investigated west of the Appalachian Mountains, such as the work by Jeff Chapman and his students in the Little Tennessee River Valley (for a general overview see Chapman 1977, 1985a, 1985b). There is good evidence that Middle Archaic lithic technologies changed dramatically. End scrapers, at times associated with Paleoindian traditions, are discontinued, raw materials tend to reflect the greater use of locally available materials, and mortars are initially introduced. Associated with these technological changes there seem to also be some significant cultural modifications. Prepared burials begin to more commonly occur and storage pits are identified. The work at Middle Archaic river valley sites, with their evidence of a diverse floral and faunal subsistence base, seems to stand in stark contrast to Caldwell's Middle Archaic "Old Quartz Industry" of Georgia and the Carolinas, where axes, choppers, and ground and polished stone tools are very rare.

Among the most common of all Middle Archaic artifacts is the Morrow Mountain Stemmed projectile point that was originally divided into two varieties by Coe (1964:37,43) based primarily on the size of the blade and the stem. Morrow Mountain I points had relatively small triangular blades with short, pointed stems. Morrow Mountain II points had longer, narrower blades with long, tapered stems. Coe suggested a temporal sequence from Morrow Mountain I to Morrow Mountain II. While this has been rejected by some archaeologists, who suggest that the differences are entirely related to the life-stage of the point, the debate is far from settled and Coe has considerable support for his scenario.

The Morrow Mountain point is also important in our discussions since it represents a departure from the Carolina Stemmed Tradition. Coe has suggested that the groups responsible for the Middle Archaic Morrow Mountain (and the later Guilford points) were intrusive ("without any background" in Coe's words) into the North Carolina Piedmont, from the west, and were contemporaneous with the groups producing Stanly points (Coe 1964:122-123; see also Phelps

1983:23). Phelps, building on Coe, refers to the Morrow Mountain and Guilford as the "Western Intrusive horizon." Sassaman (1995) has recently proposed a scenario for the Morrow Mountain groups that would support this west-to-east time-transgressive process. Abbott and his colleagues, perhaps unaware of Sassaman's data, dismiss the concept, commenting that the shear distribution and number of these points "makes this position wholly untenable" (Abbott et al. 1995:9).

The controversy surrounding Morrow Mountain also includes its posited date range. Coe (1964:123) did not expect the Morrow Mountain to predate 6500 B.P., yet more recent research in Tennessee reveals a date range of about 7500 to 6500 B.P. Sassaman and Anderson (1994:24) observe that the South Carolina dates have never matched the antiquity of their more western counterparts and suggest continuation to perhaps as late as 5500 B.P. In fact they suggest that even later dates are possible since it can often be difficult to separate Morrow Mountain and Guilford points.

A recently defined point is the MALA. The term is an acronym standing for Middle Archaic and Late Archaic, the strata in which these points were first encountered at the Pen Point site (38BR383) in Barnwell County, South Carolina (Sassaman 1985). These stemmed and notched lanceolate points were originally found in a context suggesting a single-episode event with variation not based on temporal variation. The original discussion was explicitly worded to avoid application of a typology, although as Sassaman and Anderson (1994:27) note, the "type" has spread into more common usage. There are possible connections with both the Halifax points of North Carolina and the Benton points of the middle Tennessee River valley, while the "heartland" for the MALA appears confined to the lower middle Coastal Plain of South Carolina.

The available information has resulted in a variety of competing settlement models. Some argue for increased sedentism and a reduction of mobility (see Goodyear et al. 1979:111). Ward argues that the most appropriate model is one that

includes relatively stable and sedentary hunters and gatherers "primarily adapted to the varied and rich resource base offered by the major alluvial valleys" (Ward 1983:69). While he recognizes the presence of "inter-riverine" sites, he discounts explanations that focus on seasonal rounds, suggesting "alternative explanations . . . [including] a wide range of adaptive responses." Most importantly, he notes that:

the seasonal transhumance model and the sedentary model are opposite ends of a continuum, and in all likelihood variations on these two themes probably existed in different regions at different times throughout the Archaic period (Ward 1983:69).

Others suggest increased mobility during the Archaic (see Cable 1982). Sassaman (1983) has suggested that the Morrow Mountain phase people had a great deal of residential mobility, based on the variety of environmental zones they are found in and the lack of site diversity. The high level of mobility, coupled with the rapid replacement of these points, may help explain the seemingly large numbers of sites with Middle Archaic assemblages. Curiously, the later Guilford phase sites are not as widely distributed, perhaps suggesting that only certain micro-environments were used (cf. Ward [1983:68-69] who would likely reject the notion that substantially different environmental zones are, in fact, represented).

Recently Abbott et al. argue for a combination of these models, noting that the almost certain increase in population levels probably resulted in a contraction of local territories. With small territories there would have been significantly greater pressure to successfully exploit the limited resources by more frequent movement of camps. They discount the idea that these territories could have been exploited from a single base camp without horticultural technology. Abbott and his colleagues conclude, "increased residential mobility under such conditions may in fact represent a common stage in the development

of sedentism" (Abbott et al. 1995:9).

From excavations at a Sand Hills site in Chesterfield County, South Carolina, Gunn and his colleague (Gunn and Wilson 1993) offer an alternative model for Middle Archaic settlement. He accepts that the uplands were desiccated from global warming, but rather than limiting occupation, this environmental change made the area more attractive for residential base camps. Gunn and Wilson suggest that the open, or fringe, habitat of the upland margins would have been attractive to a wide variety of plant and animal species.

The Late Archaic, usually dated from 6,000 to 3,000 or 4,000 B.P., is characterized by the appearance of large, square stemmed Savannah River projectile points (Coe 1964). These people continued to intensively exploit the uplands much like earlier Archaic groups with, the bulk of our data for this period coming from the Uwharrie region in North Carolina.

One of the more debated issues of the Late Archaic is the typology of the Savannah River Stemmed and its various diminutive forms. Oliver, refining Coe's (1964) original Savannah River Stemmed type and a small variant from Gaston (South 1959:153-157), developed a complete sequence of stemmed points that decrease uniformly in size through time (Oliver 1981, 1985). Specifically, he sees the progression from Savannah River Stemmed to Small Savannah River Stemmed to Gypsy Stemmed to Swannanoa from about 5000 B.P. to about 1,500 B.P. He also notes that the latter two forms are associated with Woodland pottery.

This reconstruction is still debated with a number of archaeologists expressing concern with what they see as typological overlap and ambiguity. They point to a dearth of radiocarbon dates and good excavation contexts at the same time they express concern with the application of this typology outside the North Carolina Piedmont (see, for a synopsis, Sassaman and Anderson 1990:158-162, 1994:35).

In addition to the presence of Savannah River points, the Late Archaic also witnessed the introduction of steatite vessels (see Coe 1964:112-113; Sassaman 1993), polished and pecked stone artifacts, and grinding stones. Some also include the introduction of fiber-tempered pottery about 4000 B.P. in the Late Archaic (for a discussion see Sassaman and Anderson 1994:38-44). This innovation is of special importance along the Georgia and South Carolina coasts, but seems to have had only minimal impact in the uplands of South or North Carolina.

There is evidence that during the Late Archaic the climate began to approximate modern climatic conditions. Rainfall increased resulting in a more lush vegetation pattern. The pollen record indicates an increase in pine that reduced the oak-hickory nut masts that previously were so widespread. This change probably affected settlement patterning since nut masts were now more isolated and concentrated. From research in the Savannah River valley near Aiken, South Carolina, Sassaman has found considerable diversity in Late Archaic site types with sites occurring in virtually every upland environmental zone. He suggests that this more complex settlement pattern evolved from an increasingly complex socio-economic system. While it is unlikely that this model can be simply transferred to the Sand Hills of South Carolina without an extensive review of site data and micro-environmental data, it does demonstrate one approach to understanding the transition from Archaic to Woodland.

## Woodland Period

As previously discussed, there are those who see the Woodland beginning with the introduction of pottery. Under this scenario the Early Woodland may begin as early as 4,500 B.P. and continued to about 2,300 B.P. Diagnostics would include the small variety of the Late Archaic

Savannah River Stemmed point (Oliver 1985) and pottery of the Stallings and Thoms Creek series. Sand tempered Thoms Creek wares are decorated using punctations, jab-and-drag, and incised designs (Trinkley 1976). Also potentially included is Refuge wares, also characterized by sandy paste, but often having only a plain or dentate-stamped surface (Waring 1968). Others would have the Woodland beginning about 3,000 B.P. and perhaps as late as 2,500 B.P. with the introduction of pottery that is cord-marked or fabric-impressed and suggestive of influences from northern cultures.

There remains, in South Carolina, considerable ambiguity regarding the pottery series found in the Sand Hills and their association with coastal plain and piedmont types.

In the Piedmont, the Early Woodland is marked by a pottery type defined by Coe (1964:27-29) as Badin.<sup>3</sup> This pottery is identified as having very fine sand in the paste with an occasional pebble. Coe identified cord-marked, fabric-marked, net-impressed, and plain surface finishes. Beyond this pottery little is known about the makers of the Badin wares and relatively few of these sherds are reported from South Carolina sites.

Somewhat more information is available for the Middle Woodland, typically given the range of about 2,300 B.P. to 1,200 B.P. In the Piedmont and even into the Sand Hills, the dominant Middle Woodland ceramic type is typically identified as the Yadkin series. Characterized by a crushed quartz temper the pottery includes surface treatments of cord-marked, fabric-marked, and a very few linear check-stamped sherds (Coe 1964:30-32). It is regrettable that several of the seemingly "best" Yadkin sites, such as the Trestle site (31AN19) explored by Peter Cooper (Ward 1983:72-73), have never been published.

Yadkin ceramics are associated with

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<sup>3</sup> The ceramics suggest clear regional differences during the Woodland that seem to only be magnified during the later phases. Ward (1983:71), for

example, notes that there are "marked distinctions" between the pottery from the Buggs Island and Gaston Reservoirs and that from the south-central Piedmont.

medium-sized triangular points, although Oliver (1981) suggests that a continuation of the Piedmont Stemmed Tradition to at least 1650 B.P. coexisted with this Triangular Tradition. The Yadkin in South Carolina has been best explored by research at 38SU83 in Sumter County (Blanton et al. 1986) and at 38FL249 in Florence County (Trinkley et al. 1993)

In some respects the Late Woodland (1,200 B.P. to 400 B.P.) may be characterized as a continuation of previous Middle Woodland cultural assemblages. While outside the Carolinas there were major cultural changes, such as the continued development and elaboration of agriculture, the Carolina groups settled into a lifeway not appreciably different from that observed for the previous 500-700 years. From the vantage point of the Middle Savannah Valley Sassaman and his colleagues note that, "the Late Woodland is difficult to delineate typologically from its antecedent or from the subsequent Mississippian period" (Sassaman et al. 1990:14). This situation would remain unchanged until the development of the South Appalachian Mississippian complex (see Ferguson 1971).

## Historic Overview

While today encompassing parts of Berkeley and Dorchester counties, the entire corridor, for much of South Carolina history, was situated primarily in what was known as Berkeley. As one of the original three counties created in 1682, Berkeley included the entire corridor, although it was situated at the furthest interior edge. In 1685 and again in 1733 the size of Berkeley was increased, although it was eliminated in 1769 with the creation of the judicial districts. Berkeley County had a brief renewal in 1785, when it was created out of Charleston, although this Berkeley County incorporated primarily what is today Dorchester County. Regardless, by 1791 this Berkeley was again eliminated as a county administrative district by the reform of the judicial districts. Berkeley was created again in 1882 when it was created from Charleston County and it was during this period that Berkeley incorporated much of what is today both Berkeley and

Charleston counties. By 1893 Berkeley had taken on a more modern appearance, although it included a significant strip of Dorchester County, including much of the project area. The county didn't assume its modern boundaries until 1962, when it lost a portion to neighboring Orangeburg County.

Both in 1769 and again in 1791, when counties were replaced by judicial districts, the study area fell into Charleston District, where much of it remained under 1882.

Looking at the broad patterns of history, the English established the first permanent settlement in what is today South Carolina in 1670 on the west bank of the Ashley River. Like other European powers, the English were lured to "new World" for reasons other than the acquisitions of land and promotion of agriculture. The Lords Proprietors, who owned the colony until 1719-1720, intended to discover a staple crop whose marketing would provide great wealth through the mercantile system.

By 1680 the settlers of Albermarle Point had moved their village across the bay to the tip of the peninsula formed by the Ashley and Cooper rivers. This new settlement at Oyster Point would become modern-day Charleston. The move provided not only a more healthful climate and an area of better defense, but:

the situation of this Town is so convenient for public Commerce that it rather seems to be the design of some skillful Artist than the accidental position of nature (Mathew 1954:153).

The early settlers of the Carolina colony came from other mainland colonies, England, and the European continent. But the future of Carolina was largely directed by the large number of colonists from the English West Indies. This Caribbean connection has been discussed by Waterhouse (1975), who argues that the Caribbean immigrants were largely from old families of

economic and political prominence which formed the Barbados élite. Waterhouse observes that while elsewhere in the American colonies the early settled families were displaced from their established positions of power and economic superiority by newcomers, this did not occur in South Carolina. In Carolina:

a relatively large proportion of those who, in the middle of the eighteenth century, were among the wealthier inhabitants, were descended from those families who had arrived in the colony during the first twenty years of its settlement (Waterhouse 1975:280).

This immigration turned out to be a significant factor in the stability and longevity of South Carolina's colonial élite. It also firmly established the foundations of slavery and cash crop plantations.

Many of these Barbadian immigrants settled in the Goose Creek area, forming one of the most influential political and economic groups in the colony (Stoney 1938:19). The "Goose Creek Men" included individuals such as Maurice Mathews, James Moore and John Boone. They favored increased Indian slavery, trade with the pirates or privateers that sailed the Carolina coast, and generally ignored the efforts of the Lords Proprietors to control the Colony's economic and political future. While the political power of the Goose Creek faction peaked in the 1720s, it continued to evidence considerable economic power well into the late 1740s (see Morgan 1980; Sirmans 1966).

Early agricultural experiments which involved olives, grapes, silkworms, and oranges were less than successful. While the Indian trade was profitable to many of the Carolina colonies, it did not provide the Proprietors with the wealth they were expected from the new colony. This trade was also limited since the Indian population was so dramatically reduced by European disease,

the sale of alcohol, and slavery.

Cattle raising also was an easy way to exploit the region's land and resources, offering a relatively secure return for very little capital investment. Few slaves were necessary to manage the herd. The mild climate of the low country made winter forage more abundant and winter shelters unnecessary. The salt marshes on the coast, useless for other purposes, provided excellent grazing and eliminated the need to provide salt licks. More interior swamps found similar vegetation and provided a constant water supply (Coon 1972; Dunbar 1961). Production of cattle, hogs, and sheep quickly outstripped local consumption and by the early eighteenth century beef and pork were principal exports of the Colony to the West Indies (Ver Steeg 1975:114-116). This allowed the ties between Carolina and the Caribbean to remain strong, and provided essential provisions to the large scale, single crop plantations.

Rice and indigo both competed for the attention of Carolina planters. Although introduced at least by the 1690s, rice did not become a significant staple crop until the early eighteenth century. At that time it not only provided the Proprietors with the economic base the mercantile system required, but it was also to form the basis of South Carolina's plantation system — slavery.

South Carolina's economic development during the pre-Revolutionary War period involved a complex web of interactions between slaves, planters, and merchants. By 1710 slaves were starting to be concentrated on a few, large slave-holding plantations. By the close of the eighteenth century some South Carolina plantations had a ratio of slaves to whites that was 27:1 (Morgan 1977). And by the end of the century over half of eastern South Carolina's white population held slaves. With slavery came, to many, unbelievable wealth. Coclanis notes that:

on the eve of the American Revolution, the white population of the low country was by far the richest single group in British



North America. With the area's wealth based largely on the expropriation by whites of the golden rice and blue dye produced by black slaves, the Carolina low country had by 1774 reached a level of aggregate wealth greater than that in many parts of the world even today. The evolution of Charleston, the center of the low-country civilization, reflected not only the growing wealth of the area but also its spirit and soul (Coclanis 1989:7).

Only certain areas of the low country, however, were suitable for rice production. During the early years rice was grown as an upland crop, in small fields adjacent to freshwater streams where water could be easily impounded and applied to the crop. By the early 1700s planters found that upland swamps, such as those in the Goose Creek area, were even better suited for rice, although the soils were quickly exhausted (Meriwether 1940; Sellers 1934). These upland swamps, distinct from well-drained uplands, remained the focus of Carolina rice agriculture during the entire Colonial period.

Hewat, writing in 1779, describes the process of upland swamp rice cultivation:

after the planter has obtained his tract of land, and built a house upon it, he then begins to clear his field of that load of wood with which the land is covered. Having cleared his field, he next surrounds it with a wooded fence, to exclude all hogs, sheep, and cattle from it. This field he plants with rice . . . year after year, until the lands are exhausted, or yield not a crop sufficient to answer his expectations. Then it is forsaken, and a fresh spot of land is cleared and planted, with is also treated in

like manner, and in succession forsaken and neglected (Hewatt 1836:514).

This rather simplistic commentary failed to observe the engineering feat that upland swamp rice cultivation really was. Clearing, which alone was a monumental undertaking, was followed by the construction of dams, dikes, and trenches. By one estimate, a 500 acre rice field required 60 miles of dikes and ditches (Gunn 1976:1-16). Fields were carefully leveled to ensure that they could be completely covered by water. Rice was planted during two periods -- March 10 to April 10 and June 1 to June 10 -- avoiding May since vast migrations of "rice birds" passed through the state during that period and could destroy a crop. Rice was harvested in late August.

By 1730 the majority of the population of the colony, both rural and urban, was black (Wood 1974). By 1850, 46% of Charleston District's population (which included today's Berkeley County) consisted of African American slaves (DeBow 1854:302), although Hilliard (1984:37) indicates that more than 60% of the Charleston slaveholders by 1860 owned fewer than 10 slaves. Regardless, there remained vast plantations where the owner's wealth was achieved by the labor of black slaves.

Mouzon's 1775 map shows considerable settlement along the edge of Cypress Swamp — in areas which would be conducive to upland or swamp rice cultivation. Further from the edge of the swamp — in the vicinity of the current project — there is virtually no major development. Much of the area was likely left either in woods or was farmed with upland subsistence crops.

During the eighteenth century the profits to be gained from rice were extraordinary, ranging from a 12% to nearly 28% net return on the investment, well exceeding other cash crops, such as tobacco or indigo (see Coclanis 1989:141). Charleston was the mecca around which the economic, political, and social world of Carolina revolved. Charleston provided the essential



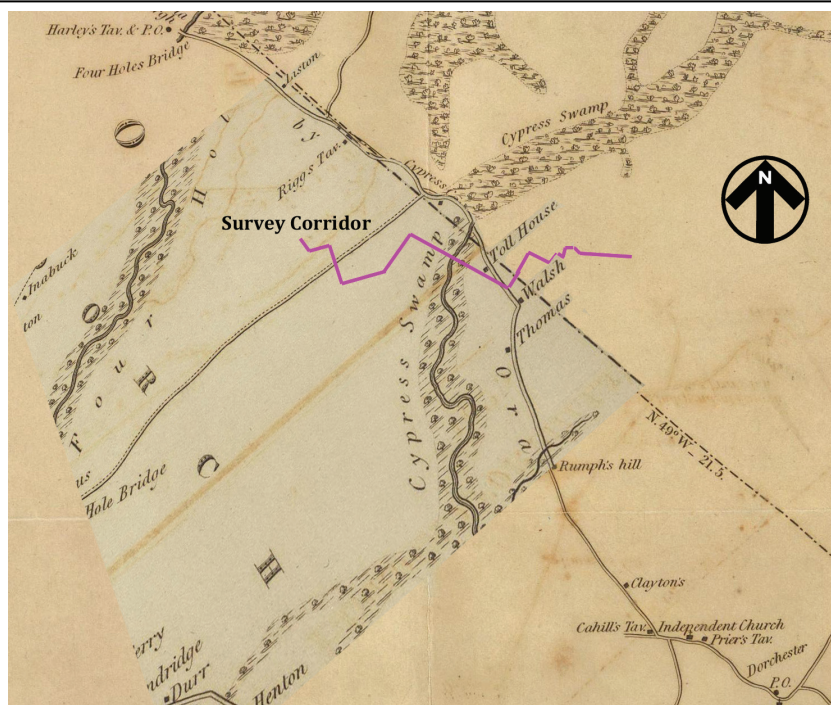


Figure 6. Mills' Atlas of 1826 showing the project area in Dorchester/Berkeley Districts.

Carolina low country collapsed in the nineteenth century. Collapse did not come suddenly - many feel, for example, that the area's "golden age" lasted until about 1820 - but come it did nonetheless. By the late nineteenth century it was clear that the forces responsible for the area's earlier dynamism had been routed, the dark victory of economic stagnation virtually complete (Coclanis 1989:111).

Mills' Atlas reveals that the survey tract, in Dorchester/Berkeley District, is without settlement (Figure

opportunity for conspicuous consumption, a mechanism which allowed the display of wealth accumulated from the plantation system.

By the end of the eighteenth century, beginning of the nineteenth century, the rate of return on rice had been reduced, at best, to about 2%, and many years the rate of return was a staggering -3% to -7%. In 1859, just before the Civil War, the return is reported to have been -28%. As Coclanis observes:

the economy of the South

6) — or more properly that Mills failed to identify

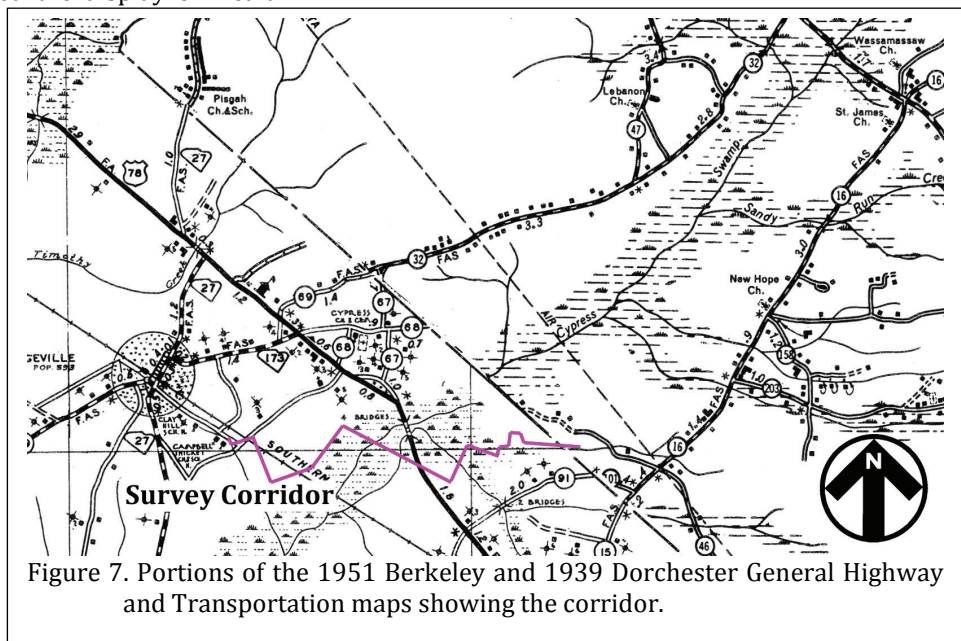


Figure 7. Portions of the 1951 Berkeley and 1939 Dorchester General Highway and Transportation maps showing the corridor.

any subscribers or others worthy of recording on his map. In fact, it appears that this region was so sparsely settled that the map makers were not even inclined to provide much topographic detail. There are no significant roads in the area, which likely hindered settlement. Examination of other settlement areas reveals that there is a consistent correlation between those areas and the nearby transportation network. To the southeast settlement, and roads, is far denser.

Figure 7 combines the 1939 *General Highway and Transportation Map of Dorchester County* with the 1951 map for Berkeley County. Although the maps are over a decade apart, the area can still be characterized as sparsely settled. There are no farm units or other sites indicated in the vicinity of the corridor on either map.

## Previous Investigations

Examination of ArchSite identified no previously recorded archaeological sites in the 500 foot wide APE.

Dorchester and Berkeley Counties have both received comprehensive architectural surveys (Schneider and Fick 1989 and Fick and Davis 1996). There were no architectural sites identified in either county within the APE or surrounding area.



# Methods

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## Archaeological Field Methods

The initially proposed field techniques involved the placement of shovel tests at 100-foot intervals along the centerline of the corridor, which was staked at the time of the survey. Since the corridor is only 75 feet in width, a single transect was deemed satisfactory.

All soil was screened through ¼-inch mesh, with each test numbered sequentially along the corridor (corresponding to the station number). Each test measure about 1 foot square and is normally be taken to a depth of at least 1.0 foot or until subsoil was encountered. All cultural remains were collected, except for mortar and brick, which would be quantitatively noted in the field and discarded. Notes will be maintained for profiles at any sites encountered.

Should sites (defined by the presence of three or more artifacts from either surface survey or shovel tests within a 50 feet area) be identified, further tests would be used to obtain data on site boundaries, artifact quantity and diversity, site integrity, and temporal affiliation. For small or very recent sites these tests would be placed at 25 to 50 feet intervals in a simple cruciform pattern until two consecutive negative shovel tests were encountered. For larger sites or sites where we felt there was a potential for National Register eligibility, shovel tests would incorporate the entire site within the project corridor. Again, shovel tests would be placed at 25 to 50 foot intervals. We are precluded from examining areas outside the corridor by the easements obtain by Central Carolina Power Cooperative.

The information required for completion

of South Carolina Institute of Archaeology and Anthropology site forms would be collected and photographs would be taken, if warranted in the opinion of the field investigator.

These proposed techniques were implemented with no modifications. A total of 180 shovel tests were excavated along the centerline of the corridor. Only where the 100-foot station was in a roadway or wet area we shovel tests not excavated.

The GPS positions were taken with a WAAS enabled Garmin 76 rover that tracks up to twelve satellites, each with a separate channel that is continuously being read. The benefit of parallel channel receivers is their improved sensitivity and ability to obtain and hold a satellite lock in difficult situations, such as in forests or urban environments where signal obstruction is a frequent problem. This was a vital concern for the study area.

## Architectural Survey

As previously discussed, we elected to use a 500 foot area of potential effect (APE). The architectural survey would record buildings, sites, structures, and objects that appeared to have been constructed before 1950. Typical of such projects, this survey recorded only those which have retained "some measure of its historic integrity" (Vivian 2001:5) and which were visible from public roads.

For each identified resource we would complete a Statewide Survey Site Form and at least two representative photographs were taken. The Survey Staff of the S.C. Department of Archives and History would assign permanent control numbers at the conclusion of the study. The Site Forms for



the resources identified during this study would be submitted to the S.C. Department of Archives and History.

## Site Evaluation

Archaeological sites will be evaluated for further work based on the eligibility criteria for the National Register of Historic Places. Chicora Foundation only provides an opinion of National Register eligibility and the final determination is made by the lead federal agency, in consultation with the State Historic Preservation Officer at the South Carolina Department of Archives and History.

The criteria for eligibility to the National Register of Historic Places is described by 36CFR60.4, which states:

the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and

a. that are associated with events that have made a significant contribution to the broad patterns of our history; or

b. that are associated with the lives of persons significant in our past; or

c. that embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual

distinction; or

d. that have yielded, or may be likely to yield, information important in prehistory or history.

*National Register Bulletin 36* (Townsend et al. 1993) provides an evaluative process that contains five steps for forming a clearly defined explicit rationale for either the site's eligibility or lack of eligibility. Briefly, these steps are:

- identification of the site's data sets or categories of archaeological information such as ceramics, lithics, subsistence remains, architectural remains, or sub-surface features;

- identification of the historic context applicable to the site, providing a framework for the evaluative process;

- identification of the important research questions the site might be able to address, given the data sets and the context;

- evaluation of the site's archaeological integrity to ensure that the data sets were sufficiently well preserved to address the research questions; and

- identification of important research questions among all of those that might be asked and answered at the site.

This approach, of course, has been developed for use documenting eligibility of sites being actually nominated to the National Register of Historic Places where the evaluative process must stand alone, with relatively little reference to other documentation and where typically only one site is being considered. As a result, some aspects of the evaluative process have been summarized, but we have tried to focus on an archaeological site's ability to address significant research topics within the context of its available data sets.

For architectural sites the evaluative

process was somewhat different. Given the relatively limited architectural data available for most of the properties, we focus on evaluating these sites using National Register Criterion C, looking at the site's "distinctive characteristics." Key to this concept is the issue of integrity. This means that the property needs to have retained, essentially intact, its physical identity from the historic period.

Particular attention would be given to the integrity of design, workmanship, and materials. Design includes the organization of space, proportion, scale, technology, ornamentation, and materials. As *National Register Bulletin* 36 observes, "Recognizability of a property, or the ability of a property to convey its significance, depends largely upon the degree to which the design of the property is intact" (Townsend et al. 1993:18). Workmanship is evidence of the artisan's labor and skill and can apply to either the entire property or to specific features of the property. Finally, materials – the physical items used on and in the property – are "of paramount importance under Criterion C" (Townsend et al. 1993:19). Integrity here is reflected by maintenance of the original material and avoidance of replacement materials.

## Laboratory Analysis

The cleaning and analysis of artifacts that might be collected would be conducted in Columbia at the Chicora Foundation laboratories. Any such materials will be catalogued and accessioned for curation at the South Carolina Institute of Archaeology and Anthropology, the closest regional repository. The site forms for the identified archaeological sites will be filed with the South Carolina Institute of Archaeology and Anthropology. Field notes from the project have been prepared for curation using archival standards and will be transferred to that agency as soon as the project is complete. Photographic materials are either digital and are not archival – they are being retained by Chicora Foundation.

Should materials be recovered requiring analysis that work will follow professionally

accepted standard with a level of intensity suitable to the quantity and quality of the remains.

In general, the temporal, cultural, and typological classifications of prehistoric materials are defined by such authors as Coe (1964), Yohe (1996), Blanton et al. (1986), and Oliver et al. (1986). Historic materials, generally late nineteenth or early twentieth century, are generally classified using such authors as Jones and Sullivan (1980) for glass and Adams (1980), Bartovics (1978), and Price (1979) for ceramics.



# Survey Results

The archaeological survey of the transmission corridor identified two isolated finds on the corridor. Neither meet the definition of a site and both are considered not eligible for inclusion on the National Register of Historic Places. One site was found about 150 feet east of the corridor centerline. This site is briefly discussed, but is not assessed for the National Register since it was not located on the corridor.

The architectural survey of the APE, designed to identify any structures over 50 years in age that retain their integrity and that are potentially eligible for the National Register of Historic Places revealed no such structures. One cemetery was identified outside, but adjacent to the corridor. It is briefly assessed as eligible for the National Register under Criterion D.

## Archaeological Sites

One archaeological site was identified during this examination.

Site 38DR494 was discovered at test Station 280+00 and consisted of 4 tertiary flakes of Allendale chert in dark brown sandy loam within 0.6 foot of the surface. The initial test (at Station 280+00) was excavated to 1.4 feet and no additional materials were recovered. Additional tests were excavated in a cruciform at 50 foot intervals. Shovel tests 280 north, 280 south, and 280 east were all negative. Shovel test 280 west was the only positive test in the cruciform. That test produced one tertiary Allendale chert flake in dark brown sandy loam within 0.7 of the surface. The test was excavated 1.9 feet and no addition materials were recovered.

The UTM coordinates for the site are 565797E 3659855N (NAD27 datum). The site is located in recent secondary growth with evidence of past plowing. The site is approximately 50 feet

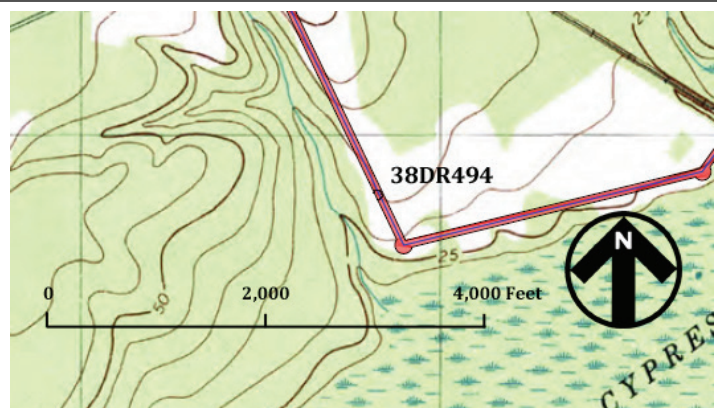


Figure 7. Location of site 38DR494 on the Ridgeville 7.5' USGS topographic map.

by 50 feet with artifacts recovered being in two shovel tests.

No shovel tests were conducted outside the Central Electric Power Cooperative corridor since there is no authorization to do so.

The site is assessed as not eligible because of the plowing and confinement to the plowzone, the very low density of remains, the failure to identify diagnostic materials, and the very low research potential. We do not recommend any further investigation of the site.

## Architectural Sites

No structures are present in the corridor or within the defined APE.



## SURVEY RESULTS

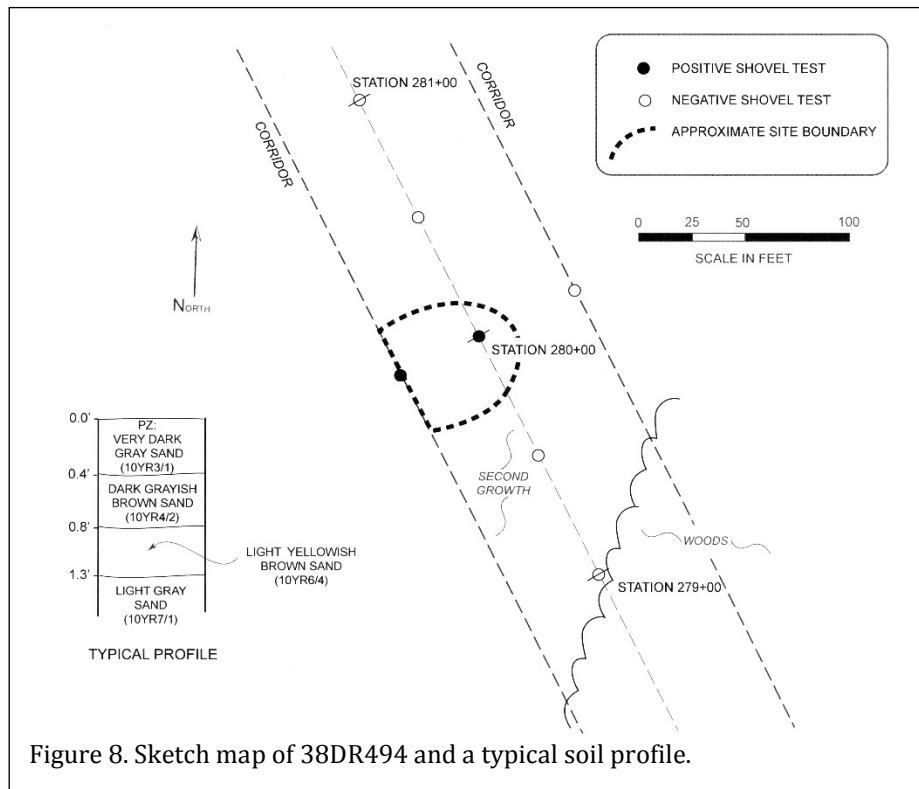


Figure 8. Sketch map of 38DR494 and a typical soil profile.

# Conclusions

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This study involved the examination of 6.01 miles of corridor proposed for the use of a transmission line joining the existing Ridgeville substation to the existing McQueen 115kV lines spanning Dorchester and Berkeley counties. This report, conducted for Mr. Tommy Jackson of Central Electric Power Cooperative, provides the results of the investigation and is intended to assist the company comply with their historic preservation responsibilities.

The South Carolina Department of Archives and History GIS was consulted to check for any NRHP buildings, districts, structures, sites, or objects in the study area. No properties in or near the project area have been determined eligible for the National Register of Historic Places. Likewise, previous archaeological studies failed to identify any cultural resources within the 100 foot APE.

The current field studies found one archaeological site (38DR494) with four chert flakes. It represents a prehistoric lithic scatter site with no known temporal associations. This site has been recommended not eligible for inclusion on the National Register of Historic Places.

No standing structures were identified by this survey. Many areas in the vicinity are losing their rural character and manufactured housing is becoming more common. Often these new subdivision housing units are replacing older family homes.

It is possible that archaeological remains may be encountered in the area during construction. As always, the utility's contractors should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to

the project engineer, who should in turn report the material to the State Historic Preservation Office, or Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No further land altering activities should take place in the vicinity of these discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).

## CONCLUSIONS

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